Monitoring the control area enables an earlier detection of the presence of sample liquid in the control area than when measuring in the detection area. When liquid is detected a signal can be emitted which terminates supply of sample liquid. The signal can be an optical and/or an acoustic signal. In the case of a capillary gap test element this for example means that blood supply to the capillary gap can be terminated. Consequently it is possible to prevent unnecessary supply of further sample liquid and thus to reduce the required amount of sample and on the other hand this procedure shortens the time required to supply sample liquid which is convenient for the user. Nevertheless the method according to the invention still ensures that the detection area or detection areas of the detection zone are adequately supplied with sample liquid. For this purpose it is advantageous when the detection area is nearer than the control area to the first zone which firstly comes into contact with the sample liquid. Thus the test element is wetted with sample liquid in the area of the detection zone earlier than in the area of the control zone and when sample liquid is present in the area of the control zone it is ensured that the detection zone is also supplied with sample liquid. According to the invention it is also preferred that the control area (area A in figure 6) is irradiated with radiation that is absorbed by the sample liquid itself. Even if the sample liquid does not itself absorb radiation or only partially absorbs radiation there is usually a decrease in the reflected or transmitted radiation when the control zone is moistened. As a result the presence of sample liquid can already be determined before a reaction with reagents has taken place in the detection zone. Figure 7 shows that a decrease in reflection in area A of the detection zone shown in figure 6 is already found in the time interval II. This is due to the fact that a thorough moistening of the control area A can be very rapidly detected by a 880 nm light-emitting diode. Detection of a wetting of this area on the basis of a colour formed in the detection zone would not have been possible until time interval IV. In the method according to the invention in which sample application is detected, the control area is preferably on the detection zone. This not only reduces the time until detection but also allows a compact construction of such an instrument in which the optical components can be in close vicinity to one another.